

Ash Grove Cement Company Material Recovery (Dredge)

USACE PN #2001-1-00155

Best Management Practices

These BMPs are intended to 1) improve accuracy of the dredging operation, both as to boundaries of the dredge area and depth of dredging, 2) minimize sediment disturbance and turbidity during dredging and dewatering, and 3) specify disposal method of dredged material.

1. Permit Conditions

- A. All permit conditions shall be complied with.
- B. Contractor shall be provided copies of permits in advance of mobilization to site.
- C. Project engineer, or his representative, shall be on site during dredging to monitor permit compliance.

2. Dredge Depth and Positioning.

- A. Contractor shall be provided a current bathymetry survey drawing
- B. Project engineer shall provide plans showing project corners and bathymetry indicating the proscribed dredge depth.
- C. Dredge supervisor will use GPS or beach survey points to locate project corners. Position of equipment will be re-checked as frequently as necessary to assure maximum accuracy of the dredge.
- D. To assure that removed material does not exceed approved dredge depth clamshell control cables shall be marked with highly visible paint to guide the dredge operator.
- E. Dredge operator shall regularly check tide boards and make any necessary changes to operation in order to compensate for changes in tidal elevation.
- F. Dredge operator shall take care not to exceed authorized dredge cut depth or disturb native sediment. Clamshell bucket shall not disturb native sediment.
- G. Accuracy of dredging is more important ~~that~~ than the speed of material removal.
- H. Post dredge bathymetry will be conducted to provide control drawing and calculate volume of material removed.



3. Control of Sediment Disturbance and Turbidity.

- A. With each grab of the clamshell, dredge material shall be completely removed and material placed on the deck barge. The clamshell bucket will not be dragged over the bottom to level the cut. Bucket shall make a complete cycle with each pass of the bucket.
- B. Deck barge will have fences to contain dredge material. These may be either barge structure or concrete ecology blocks. Hay bales with filter fabric shall be installed to serve as filters where fence is not watertight.
- C. Dredge operator shall lift bucket slowly to facilitate maximum dewatering of the bucket near the water surface, to avoid plunging.
- D. Due to the granular nature of the dredge material it is not expected that sediments will adhere to the bucket. However, if the dredge supervisor observes that sediments are adhering to the bucket, the bucket shall be rinsed in a tank to remove adhering sediment after each grab/dump cycle. The tank may be constructed of wood, hay bales or concrete ecology blocks and lined with plastic on the deck of the deck barge. Sediment residue collected in the rinse tank will be settled out and disposed of along with the dredged material as described below.

34. Transfer and Disposal of Dredged Material

- A. All dredged material, gravel or fine-grained sediments, once removed from the water, shall not be returned to the water.
- B. Dredged material shall be dewatered on the deck barge for up to four hours prior to transferring to shore, unless otherwise approved by project engineer or his on-site representative.
- C. Dredged material shall be transferred by clamshell from deck barge to dump trucks at off-site wharf or on-site at Ash Grove Cement facility.
- D. Trucks shall load on a tarp area. All spilled material shall be collected by broom or shovel and prevented from re-entering the waterway.
- E. Trucks shall deliver dredged material to Ash Grove Cement plant where it shall either be introduced into the manufacturing process, ~~or delivered to designated stockpile area. If stockpiled, the pile shall be surrounded by hay bales and filter fabric and kept covered with tarps until disposed of as described below.~~
- F. All dredged material shall be disposed of by re-introduction as raw material in the cement manufacturing process at the Ash Grove Cement plant. This process uses such high temperatures that any extant contaminants would be destroyed.